



Emerald Ash Borer



Public Meeting

September 23, 2014 6:30 p.m. – 8:00 pm
Arnold Arboretum,
Boston, MA



AGENDA

6:30 p.m. – 6:35 p.m. Welcome

Ken Gooch, *DCR Forest Health Program Director*

6:35 p.m. – 7:15 p.m. Presentations

Ken Gooch, *DCR Forest Health Program Director*

Julie Coop, DCR Urban Forestry Program Director

Kate Aikenhead, *USDA APHIS PPQ*

Lee Corte-Real, *MDAR Director of Crop Inspection Services and Pest Mgmt.*

7:15 p.m. – 8:25 p.m. Q&A/Public Input

8:25 p.m. – 8:30 p.m. Closing Remarks

Emerald Ash Borer

Biology, History,
Detection and Monitoring
in Massachusetts



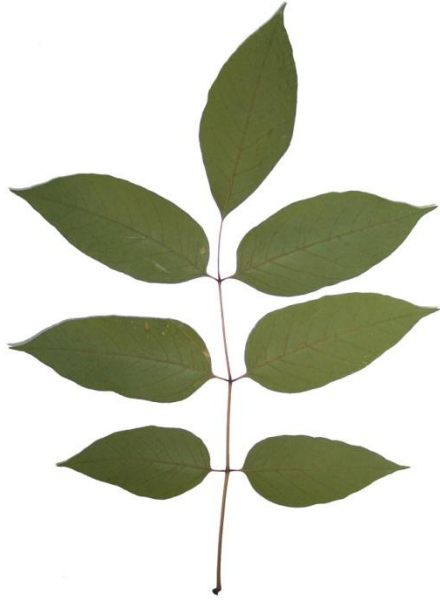
Kenneth Gooch
MA DCR
Forest Health Program Supervisor

History in Massachusetts

- **Detected on August 31, 2012**
 - Dalton, MA
 - Found on Purple Trap
 - Implemented a quarantine in Berkshire County
- **Detected on November 22, 2013**
 - North Andover, MA
 - Found on homeowner call
 - Implemented a quarantine in Essex County
- **Detected on July 16, 2014**
 - Boston, MA
 - Found on Purple Trap at Arnold Arboretum



Ash Identification



compound leaf



opposite arrangement



furrowed bark



Some Non-hosts of the EAB That Could Be Confused with Ash

- Box-elder (*Acer negundo*) only 3-5 leaflets per leaf more coarsely toothed
- Hickories (*Carya* spp.) and walnuts (*Juglans* spp.) alternate arrangement.
- Buckeye (*Aesculus* spp.) are palmately compound
- Maple (*Acer* spp.) and dogwood (*Cornus* spp.) leaves are simple

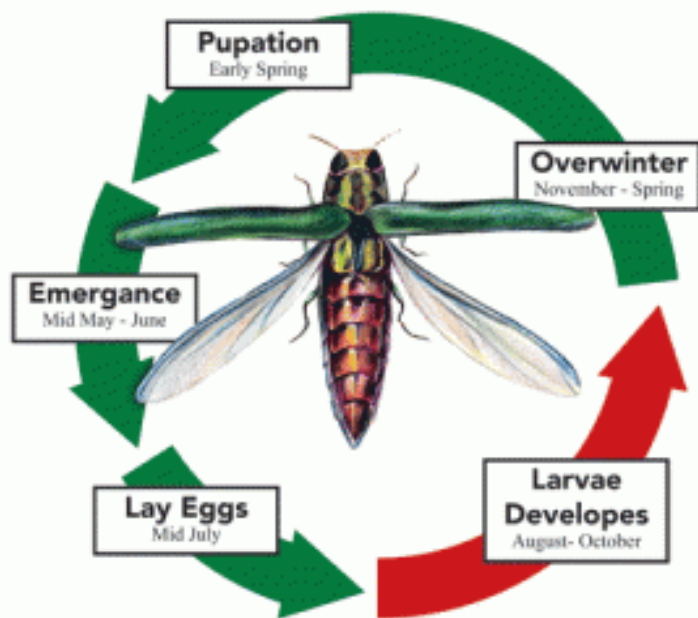
Signs and Symptoms

- D shaped exit holes



- Epicormic sprouting



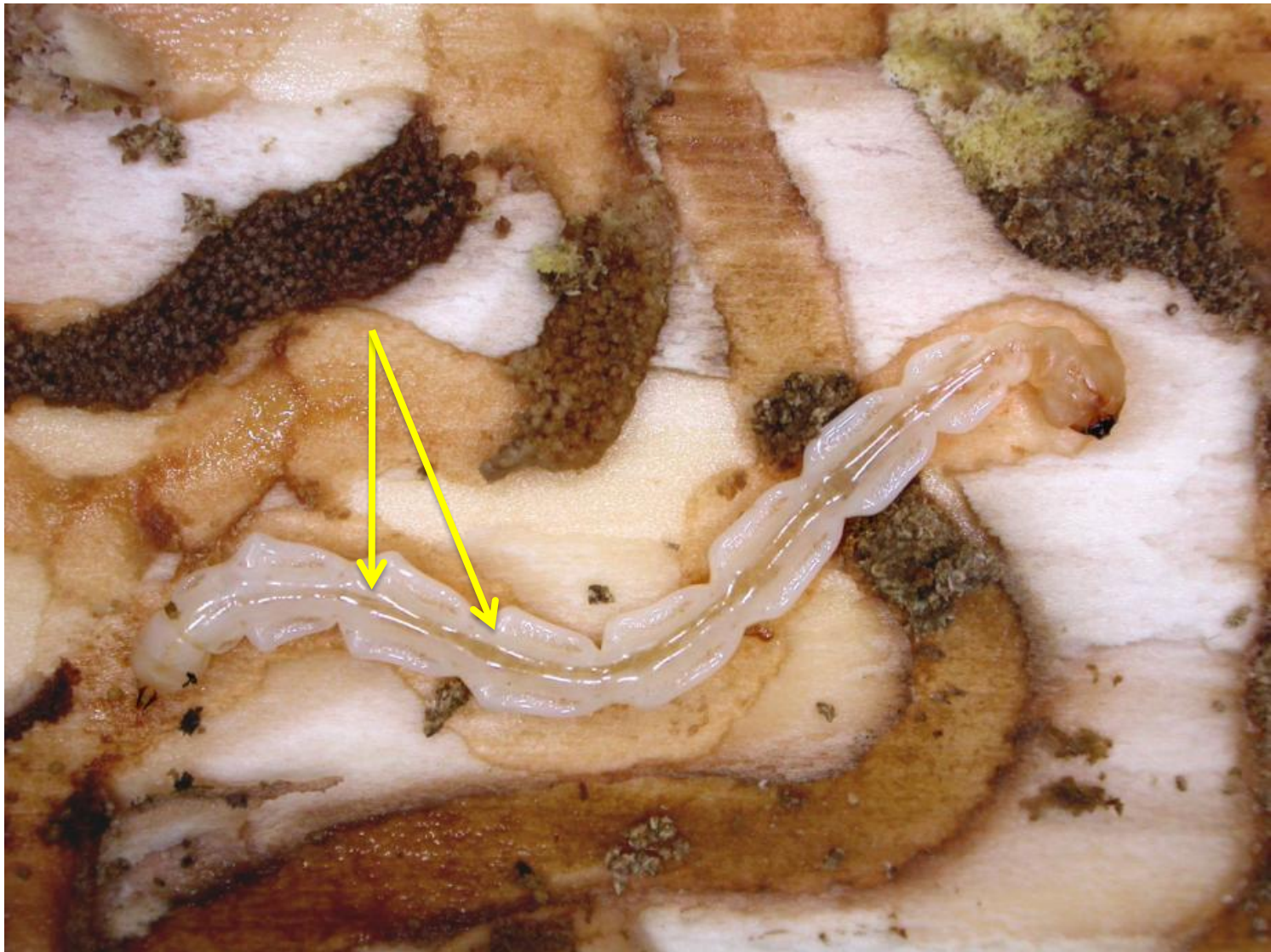


Signs and Symptoms

- Woodpecker Damage
- Serpentine Tunnels



Larva has bell shaped body segments



The Green Menace

- Suffolk County
 - Boston
- Essex County
 - North Andover
 - Methuen
 - Haverhill
- Berkshire County
 - Dalton
 - Pittsfield
 - Washington
 - Windsor
 - Lee and spreading

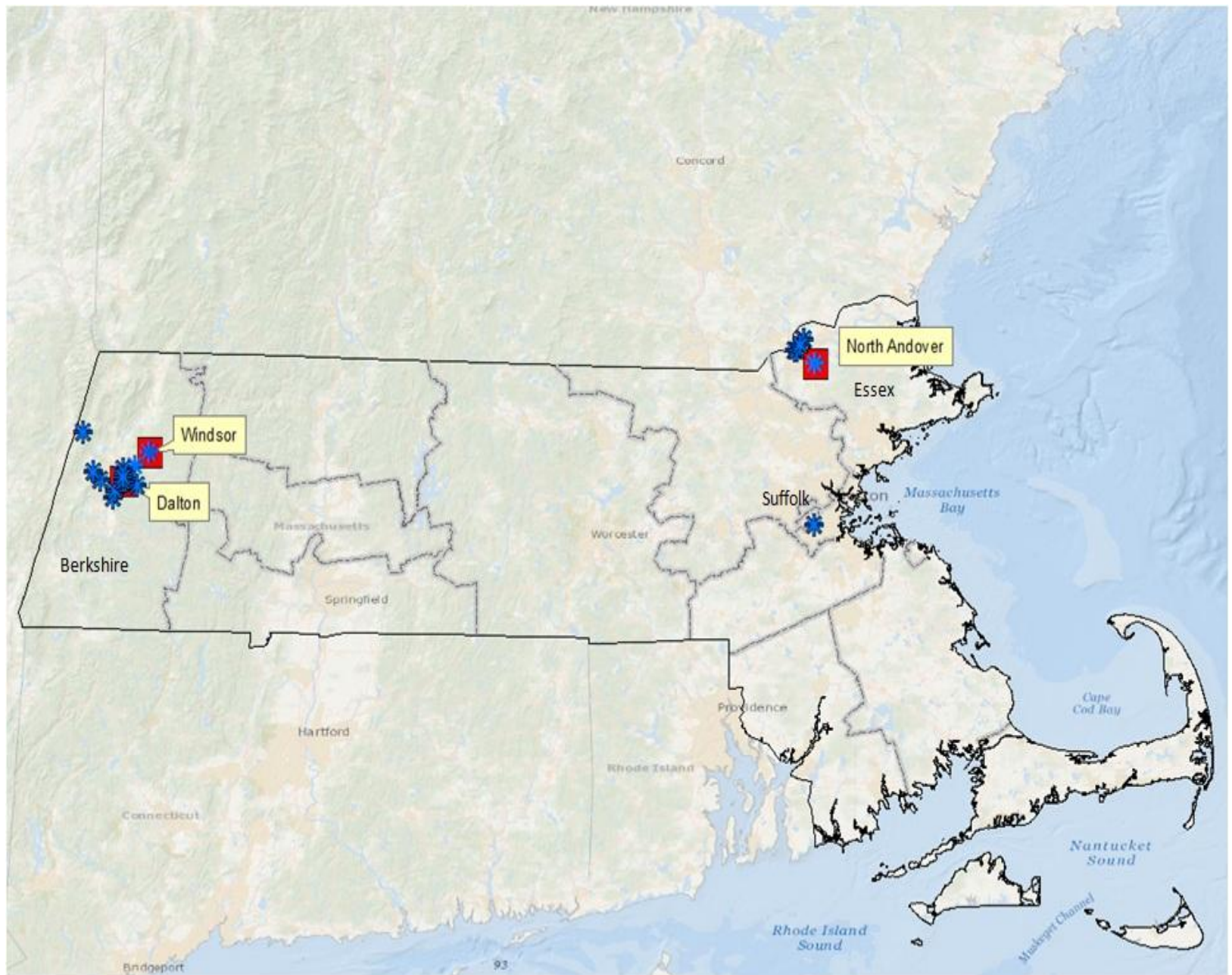


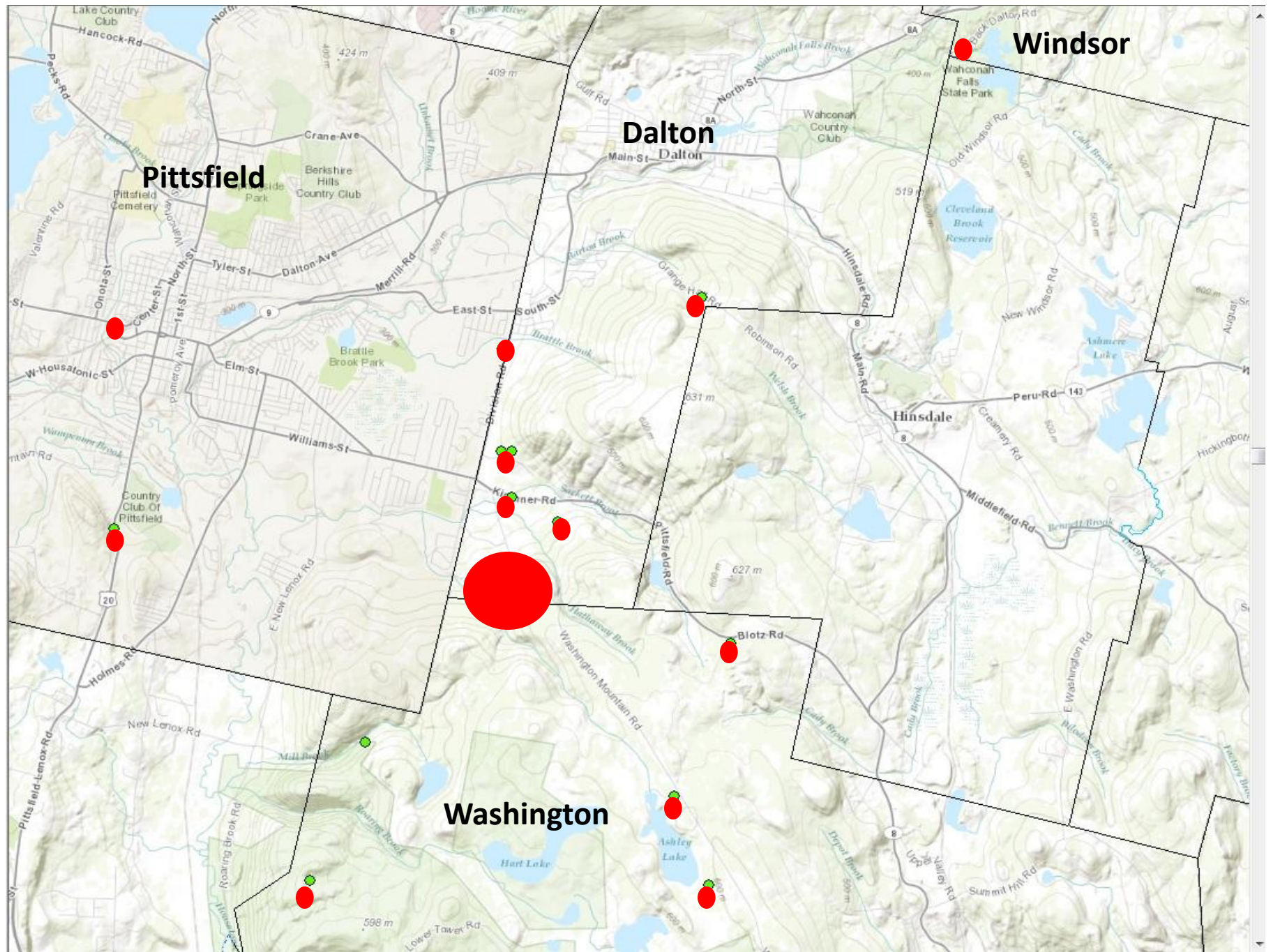
Kent Loeffler © Cornell University

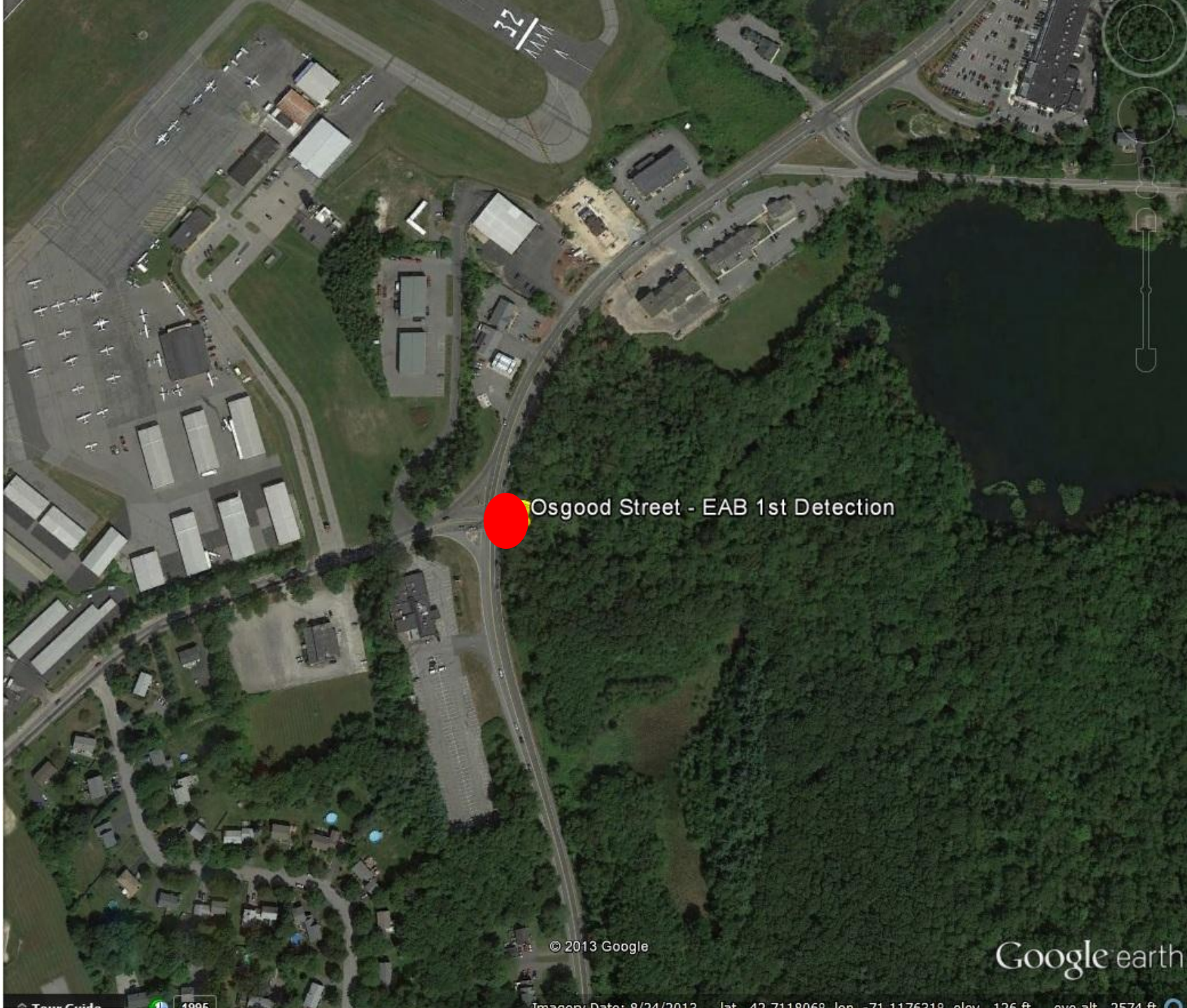
5 mm

- Detection
 - 435 Panel traps
 - Girdled trees
 - Bio-surveillance
- Monitoring
 - Girdled trees
 - Visual surveys
 - Experimental trapping
- Biological Control
 - 4 release sites
- Outreach









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AAAA

Osgood Street - EAB 1st Detection

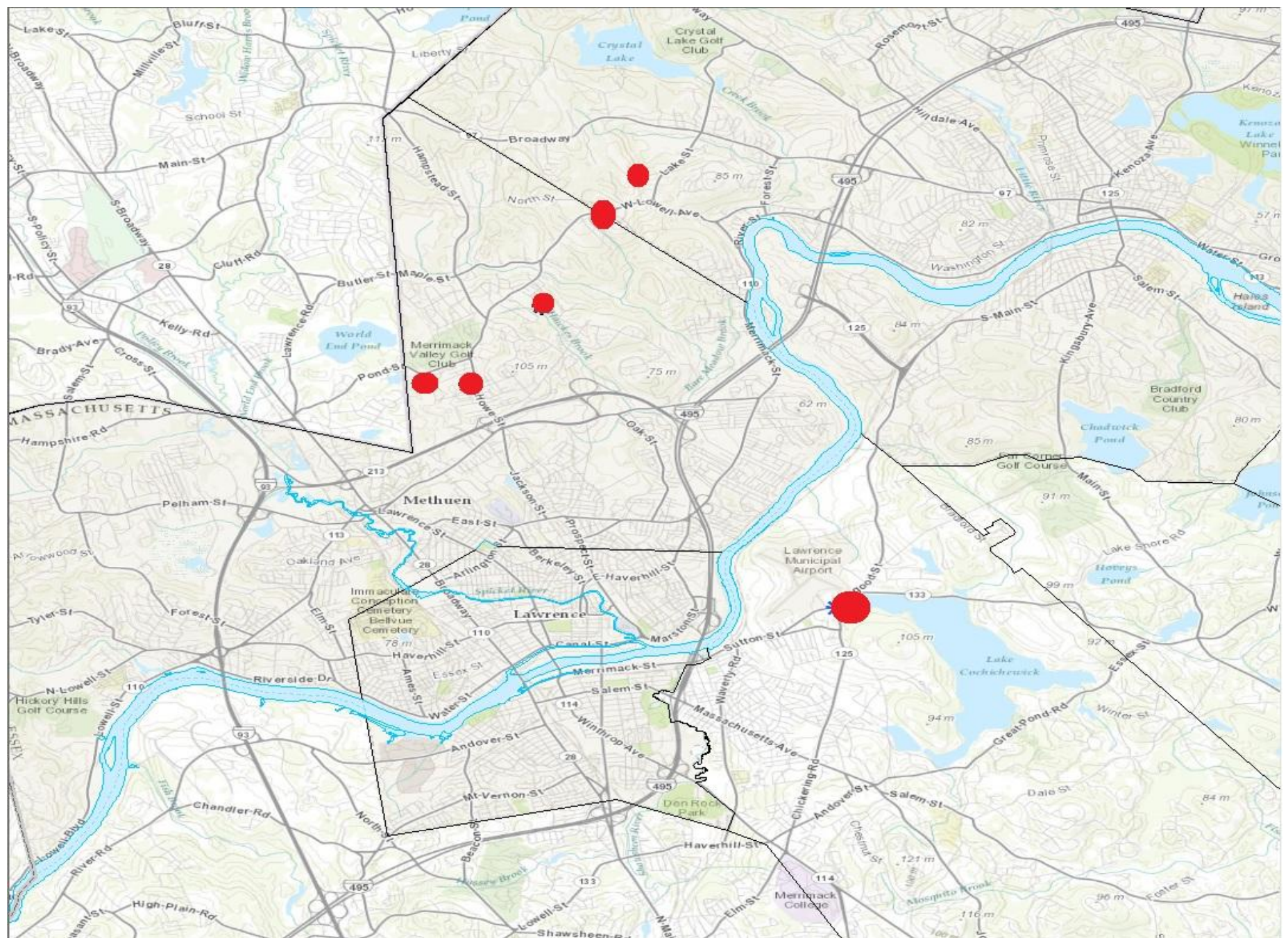
© 2013 Google

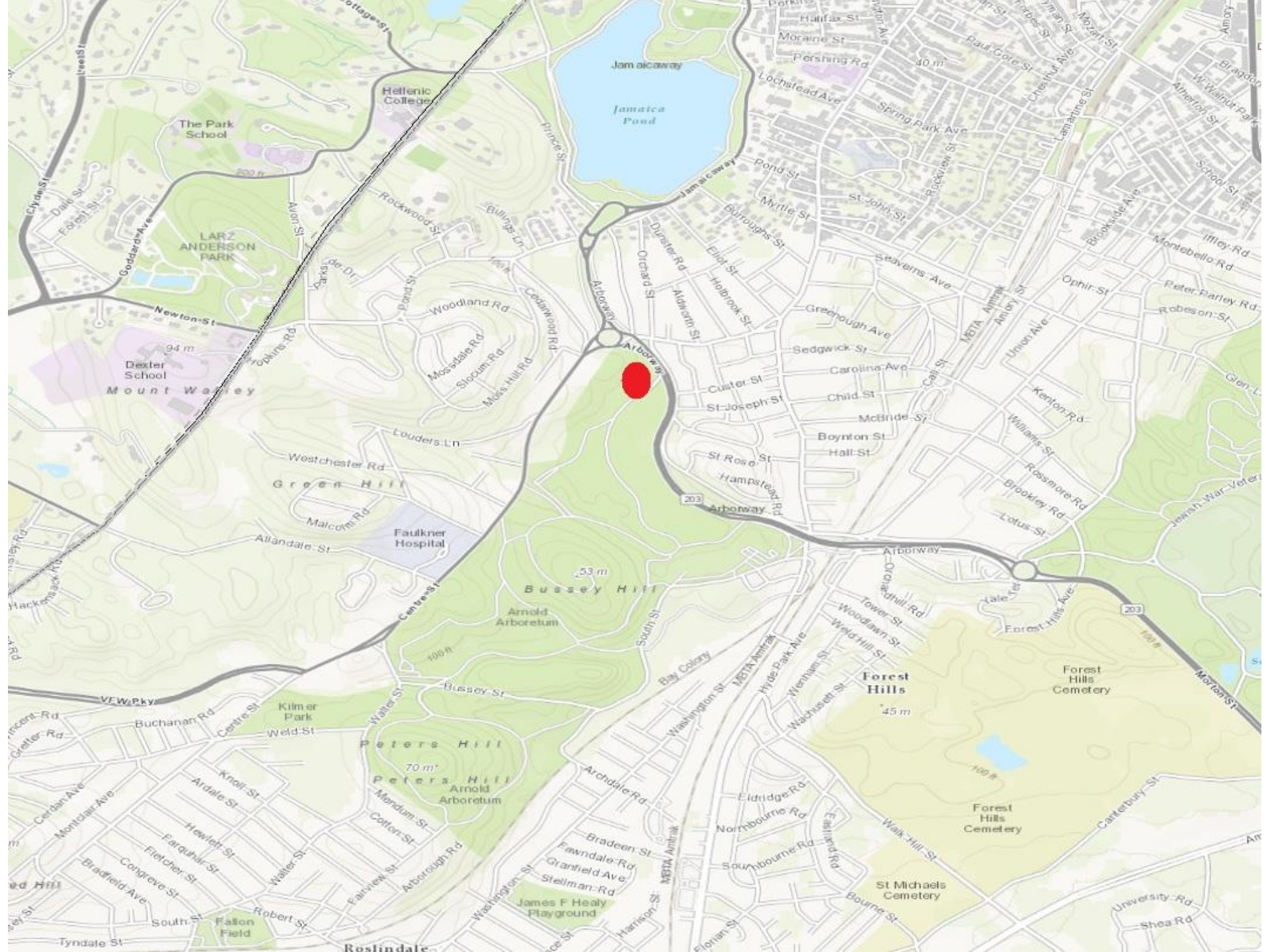
Google earth

Town Guide

1995

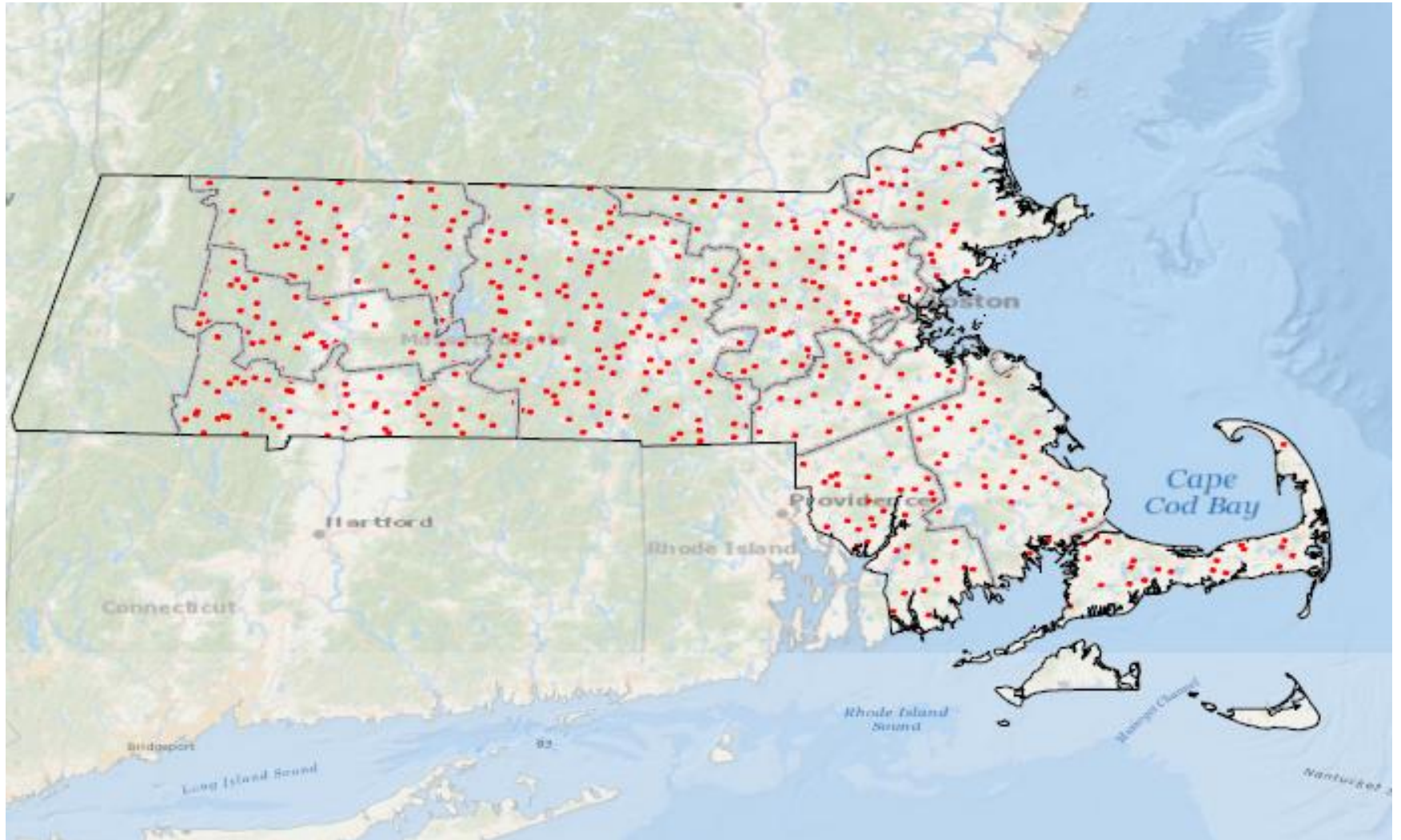
Images Date: 8/24/2013 lat: 42.7119068 lon: -71.1176218 elev: 126 ft eye alt: 2574 ft







2014 Trapping Locations



Biological Control

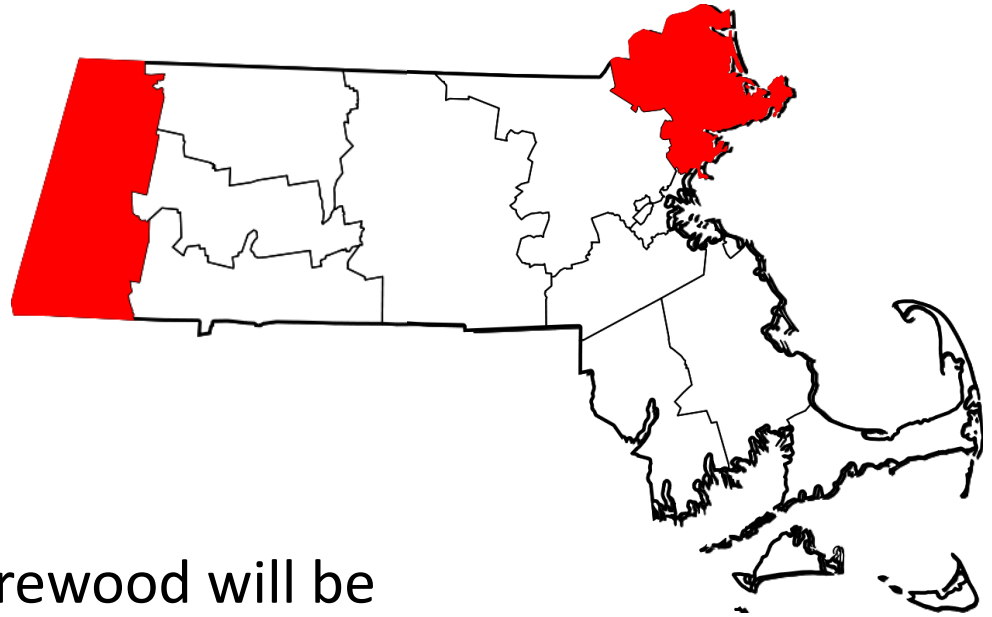
- 4 sites:
 - 1 North Andover
 - 3 Dalton/Windsor
- 2 parasitoids
 - *Tetrastichus planipennisi*
 - Kills up to 50% EAB larva
 - *Oobius agrili*
 - Kills up to 60% EAB eggs



Quarantine

Is there one currently?

- **YES**
 - *Berkshire County*
 - *Essex County*



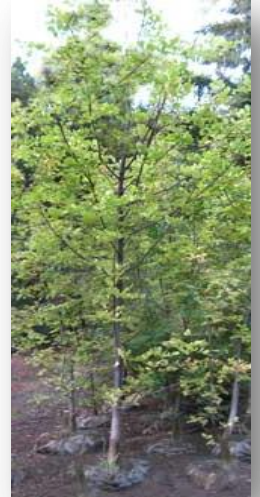
What does it mean?

- All movement of ash and firewood will be restricted from movement in and out of the designated zone
- Individuals or companies will need to have compliance agreements



Quarantine Specifics

- Regulated Material:
 - Emerald Ash Borer
 - Firewood of all hardwood species
 - Nursery stock
 - Green lumber of ash
 - Any other ash material
 - Living, dead, cut, or fallen



Quarantine Specifics

- Can move regulated material if:
 - Have either a compliance agreement or limited permit
 - And material has been processed in accordance with USDA and State standards
 - Examples:
 - heat / chemical treatment
 - removing bark and ½ inch of wood
 - Movement during non-flight time





Regulatory Work

- ❖ The regulatory challenge is to stop the artificial spread of EAB
- ❖ Officials determine who is handling ash
- ❖ Issue compliance agreements, certificates and limited permits
- ❖ Conduct operations targeting pathways of spread
- ❖ Outreach and Education
- ❖ Civil penalties if appropriate



Approved Regulatory treatments

- ❖ Remove the bark and an additional ½ inch of wood
- ❖ Kiln sterilization treatment schedule. The maximum thickness of allowable wood is three inches (time/temp/moisture content)
- ❖ Fumigate with Methyl Bromide using a USDA approved fumigator
- ❖ Heat Treatment according to schedule (140°F/60°C at core for 60 minutes). Facility must be approved by USDA.
- ❖ Chipped to less than 1" in two dimensions or follow approved USDA APHIS composting protocol.
- ❖ ISPM-15 for ash lumber in wood packing material (132.8°F/56°C for 30 minutes) via accreditation of establishment via ALSC
- ❖ Nursery Stock of Fraxinus spp.: No treatments available. Not being moved at this time.

Emerald Ash Borer and...



For More Information:

APHIS Emerald Ash Borer Home Page

- http://www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/index.shtml

Emerald Ash Borer Info

- <http://www.emeraldashborer.info/>

Forest Service EAB Information

- <http://na.fs.fed.us/fhp/eab/>

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Additional Information

This presentation will be posted at:

- Web: <http://www.mass.gov/eea/agencies/dcr/public-outreach/public-meetings/>

If you have comments for this presentation they will be due by: **October 14, 2014**

Email: dcr.updates@state.ma.us

Call: **617-626-4974**

Write: Department of Conservation and Recreation, Office of Public Outreach,
251 Causeway Street, Suite 600, Boston, MA 02114

Note: Public comments submitted to DCR by email or letter will be posted on the DCR website in their entirety, and no content, including personal information, will be redacted.

If you have questions or concerns or would like to be added to an email list to receive DCR general announcements:

Email: MassParks@state.ma.us

Call: **617-626-4973**